2.1.5 Nebraska Highway 2 (Old Cheney Road to Van Dorn Street; 4.5 miles)

Tables 9a and 9b summarize the results of the travel time studies conducted along Nebraska Highway 2. The limits of this corridor were defined by the intersection at Old Cheney Road on the east and the intersections along Van Dorn Street at 9th and 10th Streets on the west. The majority of this corridor is characterized by commercial land uses. This corridor also has a posted speed limit of 45 mph.

The results of the "before" and "after" studies along Highway 2 indicate that decreases in average speeds were observed during all three time periods. Although deviations in the average speed do exist, as shown by the upper and lower limits of the confidence interval, decreases in average speed up to 1.9 mph were observed. General increases in average speed were observed in the westbound direction of the Midday time period and the eastbound direction of the PM Peak time period.

Table 9a also summarizes the results of "before" travel time studies that were conducted during a low-volume, off-peak time period (10:30 p.m. – 12:00 a.m.). These studies were conducted in association with the efforts of Task 4 (Section 5.0). Since no signal timing adjustments were made, "after" studies were not conducted.

Individual links that experienced average speeds less than 27 mph during the "after" studies are summarized in Table 10.

Segments that experienced low average speeds along Highway 2 are those links that are defined by a major intersection at their downstream end. As mentioned previously, at these intersections, approaches on the travel time corridor and the cross-street approaches are characterized by high traffic volumes. In addition to the high traffic volumes competing for traffic signal green time, these volumes also dictate the need for additional signal phases, resulting in high intersection delay and low travel speeds. Section 2.2 will discuss operations at these intersections in further detail.

From the detailed link statistics, as provided in Appendix A, additional conclusions can be drawn for operations along the Nebraska Highway 2 corridor. In the eastbound direction during the AM Peak time period, the link between 48th Street and 56th Street experienced an average of 1.1 stops. This indicates that on at least one occasion, the study vehicle waited through two signal cycles at the intersection of 56th Street/Highway 2 before continuing eastbound. Operations similar to this occur during the PM Peak in the westbound direction at the intersection of 27th Street/Highway 2, where on average, 1.3 stops were experienced on this link.